

## ABSTRACT

A polyester fiber having outstanding flame resistance, curl-setting property, melt-drip-proof property, transparency, devitrification resistance, and controlled  
5 gloss of fiber, while maintaining physical properties of usual polyester fibers, such as heat-resistance and tensile elongation and strength is provided. A flame retardant polyester fiber for artificial hair that can solve the problem may be obtained by melt-spinning a composition obtained by  
10 melt-kneading 2 to 20 parts by weight of organic cyclic phosphorus compounds and/or phosphoric ester amido compounds (B) into 100 parts by weight of a polyester (A) comprising one or more kinds of polyalkylene terephthalates and copolymerized polyesters having a polyalkylene terephthalate as a principal  
15 component, and a composition obtained by blending organic fine particles (C) and/or inorganic fine particles (D) into the above-mentioned composition.